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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,366	04/08/2002	Christer Sinderby	776-010802-US(PAR)	7413
2512	7590	06/07/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			LAYNO, CARL HERNANDZ	
			ART UNIT	PAPER NUMBER
			3762	

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,366

Applicant(s)

SINDERBY ET AL.

Examiner

Carl H. Layno

6/3/04

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,6,15 and 17 is/are rejected.
- 7) ☒ Claim(s) 2,4,5,7-14,16 and 18-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/27/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Acknowledgment is made of applicant's preliminary amendment which was received by the Office on January 4, 2002. This document has been made of record in the file as Paper No.3.
2. Claims 1-28 are active and pending.

Priority

3. Applicant's claim for priority as a 371 national stage application of Canadian PCT application PCT/CA00/00808, filed July 7, 2000, is acknowledged.

Information Disclosure Statement

4. Acknowledgment is made of applicant's Information Disclosure Statement (PTO-1449) which was received by the Office on June 27, 2002. This document has been made of record in the file as Paper No.7.

Drawings

5. Applicant's formal drawings have been approved by the Examiner.

Specification

6. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3, 6, 15, and 17 are rejected under 35 U.S.C. 102(a) as being anticipated by the Reucher et al article “Spatial Filtering of Noninvasive Multi-electrode EMG Part I – Introduction to Measuring Technique and Applications” (Applicant’s Prior Art).

The Reucher et al article “Spatial Filtering of Noninvasive Multi-electrode EMG Part I – Introduction to Measuring Technique and Applications” (IEEE Transactions on Biomedical Engineering), cited by the applicants as Prior Art, describes a method for enhancing the quality of a plurality of sensed EMG signals (Fig.3) by using weighting factors. Page 3 of the article mentions the use of a “weighted summation of ...[electrode] signals” (left column, line 13) performed by an amplifier stage.

In regard to claims 3, 15, and 17, Reucher et al adjusts its weighting factors for both noise cancellation and inter-electrode distances by appropriate filter selection. Specifically, for electrodes spaced between 3-6mm apart, an LDD-filter is recommended, while for electrodes spaced 9mm apart a “matched filter” is recommended (p.6, left column, lines 30-36).

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9. Claims 1 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hogrel et al '032 (PCT).

The Hogrel et al '032 WIPO/PCT document, cited herein by the Examiner, describes a device for performing non-invasive electromyographic measurements (Fig.3). The device comprises an electrode array **E** (Fig. 1a) which detects electromyographic signals and sends them through amplifier circuits **5,6** (Fig.3) for "spectral filtering and weighted summation" (Abstract, lines 6-8).

Allowable Subject Matter

10. Claims 2, 4, 5, 7-14, 16, and 18-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Toomim et al '208 patent is cited for its pertinent EMG detection features and use of weighting factors. Unlike applicant's device, that of Toomim et al does not combine the weighted signals in order to get a higher quality EMG signal. Rather, the signals are processed to determine overall of muscle health..

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl H. Layno whose telephone number is (703) 308-3694. The examiner can normally be reached on Monday thru Thursday from 9 AM to 6 PM and every other Friday between 9AM and 5PM. A voice mail or E-mail message (carl.layno@uspto.gov) may be left if desired.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes, can be reached on (703) 308-5181. All faxed correspondence should be sent to the Office's new official FAX number (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Legal Instruments Examiner (LIE) Brenda Webb whose telephone number is (703) 305-7520.

Carl H. Layno

CARL LAYNO
PRIMARY EXAMINER

CHL
6/2/2004